

REMARKS

Claims 1 and 7 have been amended to recite that a phosphazene compound is added to each of the aprotic organic solvents, wherein the phosphazene compound has a difference of a boiling point from that of the respective aprotic organic solvent of not more than 25°C, and to further recite that the number of kinds of the phosphazene compounds is equal to that of the aprotic organic solvents. Support for amended Claims 1 and 7 can be found at, for example paragraphs [0095], [0105] and [0118]. Entry of this Amendment is respectfully requested.

Claims 1, 6, 7, 10 and 11 are pending.

Claim Rejections Under §§ 102 and 103

A. Claims 1 and 6 have been rejected under 35 U.S.C. §102(b) as allegedly being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as allegedly being obvious over WO/2003/005479 to Otsuki et al.

B. Claims 1 and 6 have been rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over WO '479.

Applicants respectfully traverse.

The claims are directed to a non-aqueous electrolyte for a cell. The electrolyte comprises two or more aprotic organic solvents selected from the group consisting of ethylene carbonate, propylene carbonate, diethyl carbonate, dimethyl carbonate, ethyl methyl carbonate and methyl formate, and a support salt, and further includes two or more phosphazene compounds. To each of the aprotic organic solvents is added the phosphazene compound having a difference in boiling point from that of the respective aprotic organic solvent of not more than 25°C, and the

number of kinds of the phosphazene compounds is equal to that of the aprotic organic solvents.

See, Claims 1 and 7.

Regarding the anticipation aspect of the rejection, WO '479 fails to disclose or suggest that the difference in boiling point between a phosphazene derivative having a MO/F ratio of 2/4 and that of diethyl carbonate is not more than 25°C. Moreover, WO '479 fails to disclose or suggest that the number of kinds of the phosphazene compounds is equal to that of the aprotic organic solvents.

In this regard, the Examiner takes the position that the boiling point of a phosphazene derivative having a MO/F ratio of 3/3 is 230°C as disclosed in paragraph [0084] of the present specification which, according to the Examiner, corresponds to the boiling point of ethylene carbonate. In addition, the Examiner takes the position that the boiling point of a phosphazene derivative having a MO/F ratio of 2/4 is inherently not more than 25°C from the boiling point of diethyl carbonate. Thus, the Examiner appears to conclude that WO '479 anticipates present Claims 1 and 6. See page 4, lines 1-3 of the Office Action dated August 19, 2010.

According to the Examiner “the burden is on Applicants to show differences in product comparison.”

The Examiner is misstating Applicants' burden.

The Examiner's position that the boiling point of a phosphazene derivative having a MO/F ratio of 2/4 is inherently not more than 25°C from the boiling point of diethyl carbonate is unsupported by documentary evidence. In this regard, whether the Examiner is taking official notice of the fact that Official notice of the fact that “a phosphazene derivative having a MO/F

ratio of 2/4 is inherently not more than 25°C from the boiling point of diethyl carbonate” or is relying on the theory of inherency, the Examiner’s position is improper.

Official notice unsupported by documentary evidence should only be taken by the Examiner where the facts asserted to be well-known, or to be common knowledge in the art are capable of instant and unquestionable demonstration as being well-known (i.e., defies dispute). Moreover, if such unsupported official notice is taken, the basis for such reasoning must be set forth explicitly, i.e., the Examiner must provide specific factual findings predicated on sound technical and scientific reasoning to support his or her conclusion of common knowledge. See MPEP 2144.03A. and B.

Even if the Examiner is not taking official notice, the Examiner’s reliance on the theory of inherency is improper. As set forth in MPEP 2112 IV, in relying upon the theory of inherency, the Examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.

In the present case, the Examiner merely “assumes” that the boiling point of a phosphazene derivative having a MO/F ratio of 2/4 is inherently not more than 25°C from the boiling point of diethyl carbonate without providing a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teaching of the applied prior art. Moreover, the Examiner asserts that it is Applicants’ burden to demonstrate otherwise. This is not Applicants’ burden.

It is the Examiner’s burden to provide a basis in fact and/or technical reasoning to reasonably support to support the Examiner’s conclusion of common knowledge or that the

determination that the allegedly inherent characteristic necessarily flows from the teaching of the applied prior art in the next Office Action if the rejection is to be maintained.

In addition, according to the presently claimed invention, when the presently claimed electrolyte contains, for example, an aprotic organic solvent having a low boiling point and another aprotic organic solvent having a high boiling point, the phosphazene compound corresponding to the low-boiling-point aprotic organic vaporizes at a temperature near to that at which the low-boiling-point aprotic organic solvent vaporizes. Thus, the risk of igniting-firing the vaporized aprotic organic solvent is reduced. See, paragraph [0025] of the specification as filed.

Moreover, even after the vaporization of the low-boiling aprotic organic solvent and the phosphazene compound having a boiling point near to that of the low-boiling aprotic organic solvent, the high-boiling aprotic organic solvent and the phosphazene compound having a boiling point near to that of the high-boiling aprotic organic solvent exist in the electrolyte. Thus, it is also possible to reduce the risk of igniting-firing the remaining high-boiling aprotic organic solvent. See, paragraph [0025] of the specification as filed.

In this regard, Applicants direct the Examiner's attention to Comparative Example 6 in Table 2 and Comparative Example 18 in Table 5 of the present specification. As demonstrated by Comparative Examples 6 and 18, even if the electrolyte comprises two aprotic organic solvents and two phosphazene compounds, when to one of the aprotic organic solvents is not added to a phosphazene compound, wherein the difference in boiling point between the phosphazene compound and that of the aprotic organic solvent is not more than 25°C, the risks of ignition in and out of the cell cannot be reduced.

In contrast, according to the presently claimed invention, a phosphazene compound is added to each of the aprotic organic solvents, wherein the phosphazene compound has a difference of a boiling point from that of the respective aprotic organic solvent of not more than 25°C. Thus, the risks of ignition in and out of the cell can be reduced. See Examples 1-3 and 7-10 of the present specification.

Thus, WO '479 fails to anticipate or render obvious the present claims. Accordingly, withdrawal of the rejection is respectfully requested.

C. Claims 7, 10 and 11 have been rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over WO '479 and further in view of WO/2003/005478 to Otsuki et al.

Applicants respectfully traverse.

WO '478 fails to make up for the deficiencies of WO '479 discussed above.

Thus, WO '479 and WO '478 fail to render obvious the present claims. Accordingly, withdrawal of the rejection is respectfully requested.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

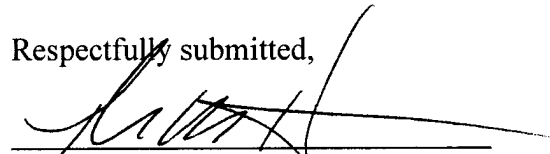
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